

IN THE CLAIMS

Independent claim 30 has been canceled. Dependent claim 31 has been amended and changed into independent form. The pending claims are provided below for the convenience of the Examiner.

1. A method of determining if the content of a source MPEG-2 stream, may be reduced, said method comprising the steps of:

- a) examining said source stream to determine if a sequence_display_extension follows the most recent sequence header and sequence extension;
- b) confirming that horizontal_size is greater than display_horizontal_size or that vertical_size is greater than display_vertical_size; and
- c) if steps a) and b) are met, reducing the content of said source stream to create a reformatted stream.

2. The method of claim 1 where step c) comprises the steps of:

- i) calculating the values of: width_mb and height_mb;
- ii) calculating the values of: top, bottom, left and right;
- iii) calculating the values: of top_mb, bottom_mb, left_mb and right_mb;
- iv) substituting into said reformatted stream a portion of new_horizontal_size for horizontal_size and a portion of new_vertical_size for vertical_size; and
- v) substituting into said reformatted stream a portion of new_horizontal_size for horizontal_size extension and a portion of new_vertical_size for vertical_size extension.

3. The method of claim 2 wherein the portion of step iv) is 12 bits.

4. The method of claim 2 wherein the portion of step v) is 2 bits.

5. The method of claim 2 further comprising the step of:

- vi) removing picture_display_extension data from said source stream when creating said reformatted stream,

6. The method of claim 5 further comprising the step of:

vii) removing macroblocks from said source stream if their horizontal position is less than left_mb or greater than right_mb or if their vertical position is less than top_mb or greater than bottom_mb, when creating said reformatted stream

7. The method of claim 6 further comprising the step of:

viii) removing slices from said source stream which contain no macroblocks, when creating said reformatted stream

8. The method of claim 7 further comprising the step of:

ix) subtracting the value of top_mb from each slice_start_code, if slice_start_code becomes less than one, then setting it to one, in said reformatted stream.

16. A computer readable medium containing instructions for reducing the content of an MPEG-2 source stream, said instructions performing the steps of:

a) examining said source stream to determine if a sequence_display_extension follows the most recent sequence header and sequence extension;

b) confirming that horizontal_size is greater than display_horizontal_size or that vertical_size is greater than display_vertical_size; and

c) if steps a) and b) are met, reducing the content of said source stream to create a reformatted stream.

17. The medium of claim 16 wherein step c) comprises the steps of:

i) calculating the values of: width_mb and height_mb;

ii) calculating the values of: top, bottom, left and right;

iii) calculating the values of top_mb, bottom_mb, left_mb and right_mb;

iv) introducing into said reformatted stream a portion of new_horizontal_size for horizontal_size and a portion of new_vertical_size for vertical_size; and

v) introducing into said reformatted stream a portion of new_horizontal_size for horizontal_size extension and a portion of new_vertical_size for vertical_size extension.

18. The medium of claim 17 wherein the portion of step iv) is 12 bits.

19. The medium of claim 18 wherein the portion of step v) is 2 bits.

20. The medium of claim 19 further containing the step of:
- vi) in creating said reformatted stream, removing picture_display_extension data from said source stream.
21. The medium of 20 further containing the step of:
- vii) in creating said reformatted stream, removing macroblocks from said source stream if their horizontal position is less than left_mb or greater than right_mb or if their vertical position is less than top_mb or greater than bottom_mb.
22. The medium of claim 21 further containing the step of:
- viii) in creating said reformatted stream, removing slices from said source stream which contain no macroblocks.
23. The medium of claim 22 further containing the step of:
- ix) subtracting the value of top_mb from each slice_start_code, if slice_start_code becomes less than one, then setting it to one, in said reformatted stream.
30. (Canceled) A video transcoder, said transcoder including a pan-scan module.
31. (Currently Amended) A video transcoder including a pan-scan module, the pan-scan module configured to perform the following steps:~~The transcoder of claim 30 wherein said pan-scan module performs the following steps:~~
- a) examining a source video stream to determine if a sequence_display_extension follows the most recent sequence header and sequence extension;
 - b) confirming that horizontal_size is greater than display_horizontal_size or that vertical_size is greater than display_vertical_size; and
 - c) if steps a) and b) are met, reducing the content of said source stream to create a reformatted stream.
32. The transcoder of claim 31 where step c) comprises the steps of:
- i) calculating the values of: width_mb and height_mb;
 - ii) calculating the values of: top, bottom, left and right;
 - iii) calculating the values: of top_mb, bottom_mb, left_mb and right_mb;

iv) substituting into said reformatted stream a portion of new_horizontal_size for horizontal_size and a portion of new_vertical_size for vertical_size; and

v) substituting into said reformatted stream a portion of new_horizontal_size for horizontal_size extension and a portion of new_vertical_size for vertical_size extension.

33. The transcoder of claim 32 wherein the portion of step iv) is 12 bits.

34. The transcoder of claim 32 wherein the portion of step v) is 2 bits.

35. The transcoder of claim 32 wherein said pan-scan module performs the additional step of:

vi) removing picture_display_extension data from said source stream when creating said reformatted stream,

36. The transcoder of claim 35 wherein said pan-scan module performs the additional step of:

vii) removing macroblocks from said source stream if their horizontal position is less than left_mb or greater than right_mb or if their vertical position is less than top_mb or greater than bottom_mb, when creating said reformatted stream

37. The transcoder of claim 36 wherein said pan-scan module performs the additional step of:

viii) removing slices from said source stream which contain no macroblocks, when creating said reformatted stream

38. The transcoder of claim 37 wherein said pan-scan module performs the additional step of:

ix) subtracting the value of top_mb from each slice_start_code, if slice_start_code becomes less than one, then setting it to one, in said reformatted stream.